THE

MEDICAL AND SURGICAL REPORTER.

No. 983.] PHILADELPHIA, JAN. 1, 1876. [Vol. XXXIV.—No. 1.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

LIFE INSURANCE COMPANIES AND PULMONARY PHTHISIS.

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The object under consideration is of such vast importance to a large body of corporations, as well as to the single individual, whose whole confidence and hope for the support of his family after his death are based on the honest and careful management of these companies, that it may be of value to dwell on this question more closely. The great mortality from pulmonary phthisis in life insurance companies has been eliciting many comments and efforts to explain the large share which falls to this disease amongst the class of so-called selected lives. Many different explanations have been sought for, according to the basis which a writer occupies, but so far we see but little practical value for the companies arising from these discussions. I do not pretend to explain and remedy this evil, but simply desire to express some thoughts which occurred to me in reading a paper and discussion following, etc., which took place at the Ohio State Medical Society.* Although the number of people dying from the disease in question is decidedly beyond our expectation, and certainly not in proportion to the care bestowed upon the examination of the applicants, I, however, think that the writer of the above-named article is somewhat exaggerating the death-rate. He says, on page 85, "that the mortality from consumption among the selected lives of insurance companies in England is from 25 to 30 per cent.;" which assertion I am not able to discuss, as I have no reports of English life insurance companies at hand. But the statement on the same page, that "in our own country the mortality tables of insurance companies indicate that consumption is responsible for one death in every four, and often for one in every three of the total mortality," and furthermore, "that consumption claims a larger percentage of victims from selected lives than from the population at large, even after excluding those under 16 years of age," may be an excuse for the following remark.

Table VIII of my statistics,* based on data received from twenty-five of the largest companies in the United States, and enumerating the deaths from all causes and from phthisis, in their relation to each other and to living members of the companies in 1873, embraces 4890 deaths from all causes and 837 from phthisis, and shows a much more favorable proportion for our American companies, as only 17·11 per cent or about ⅙ of all deaths were, according to this table, caused by phthisis. The same table also contains the statement that the German life insurance companies have not only a larger death-rate from all causes, but also from phthisis, as they lost 20·5 per cent of their members in 1871 by the latter disease. But also in these companies the

* *The Medical and Surgical Reporter*, July 31st and August 28th, 1875.

* Statistics of the mortality from pulmonary phthisis in the United States and in Europe. Baltimore, Turnbull Bro., 1875.

death-rate from phthisis does not reach the high figure of 25 or 33 per cent.

The relation between deaths from phthisis of populations at large and selected lives, is shown by the following calculation: life insurance companies have hardly ever losses by deaths occurring among members under 20 years of age. Of 772 persons dying from phthisis, whose age is given, only one died under 20 years. We can, therefore, compare the death-rate of insurance companies with the same of entire communities, by subtracting in the latter case all deaths, and the deaths from phthisis, under 20 years. Although the United States census of 1870 does not give the actual number of deaths, and therefore, not the relation of deaths to living populations, the distribution among the different seasons, sexes, ages, occupations, etc., can fairly be assumed to represent a correct co-relation. The United States census shows 492,263 deaths from all causes, and 699,896 from phthisis. Under 20 years of age 265,783 died from all causes, and 12,280 from phthisis, leaving 226,480, respective 57,616 for all ages above 20 years. Under 100 deaths, therefore, 25.48 were caused by phthisis, which is a considerably higher ratio than the insurance companies represent.

Although these figures show a more favorable condition of the companies, still their death-rate is quite out of proportion, considering the circumstances under which their members are accepted. Besides the two points mentioned, there is a third, which is even more surprising and of greater importance for the companies than a death-rate of 17 or 20 per cent. Twenty-two companies gave the length of time that those who died from phthisis were insured, and from their reports the remarkable fact is evident, that they had 54 deaths among people who, were insured* only one year or less. Seventeen of these companies gave the duration of insurance only for the period of entire years, but five, giving the time in years and months, show that 2 deaths occurred after 3, 1 after 4, 3 after 6, 1 after 7, 2 after 9, and 1 after 10 months from the time the application was granted. Considering the extremely short time of insurance in these cases, and the large number dying within the first year of their membership, we are justified to assume that a number of persons are accepted who are already tainted by disease.

* l. c., Table x, p. 52.

Against this fact all the efforts of the companies are directed and concentrated, and in this connection a few suggestions may be allowed.

We can scarcely expect that the actions of an agent, or of an applicant, can ever be perfectly controlled by the companies. Both are interested parties to effect the insurance, whilst the companies are anxious only to take "good risks," and the physician, as a neutral party, stands between them and the two former. In order to avoid any possible cöoperation of the physician and canvasser* and to make the former perfectly independent, the companies ought to have stringent and binding rules, not to accept any application, except when filled by the physician, who is especially selected and authorized by the home office. But even in this case there will always be a certain dissimilarity between the examinations of the physicians for different companies, some passing the applicants more readily, whilst others make thorough and rigid examinations. It will happen, that persons are rejected by one physician and company, and accepted by the next one to which they apply. This state of affairs can easily be changed, if all the companies doing business in one city will agree to appoint one physician only, who shall make all examinations for all the companies. He would draw a very good income from his position, perhaps a better one than his practice would yield him, and could devote all his time to the life insurance business. He would never be compelled to hurry through an examination for the sake of his own business, and would assume a position which would make him perfectly independent of all agents and canvassers. The profit arising from this arrangement would be a double one, for the companies and their members. The companies would pass less "bad risks," and the insured would profit from the greater soundness of the members, by larger dividends.

The medical examination itself, as the most important point of all, presents another feature worthy of discussion. Above all, the companies should pay the physician well for the labor he bestows in their interest, and five dollars ought to be the lowest medical fee for an examination, which, in order to be thorough and answering to the interest of the company, would require adequate time and skill. If a physi-

* Unfortunately this happened on a quite extensive scale, not long ago, in a well known company of high standing.

cian, so often pressed by urgent business, has not the full equivalent for his work, he might become induced not to devote so much attention to a single case as the interest of the company would require. There may always be medical examiners who do not do their full duty in every respect, or lack the necessary experience and skill, but it would be wrong not to limit these faults to single cases, and to make the physician responsible for the high mortality from phthisis, as the author in the Philadelphia REPORTER expresses, on page 85.

This spring some few companies thought it to their interest to issue formula of applications, comprising most rigid questions, to be filled out at the examination. The question of law, which arose from the reservation pretended by these companies in the formula, has been well and strikingly ventilated by the well-known Baltimore lawyer, Reverdy Johnson. The guarantee and safety of medical examination will scarcely be increased by a lengthy and rigorous series of questions. The physician in the service of an insurance company will alalways direct his attention to the whole present sanitary condition of the man before him, and will probably arrive at the proper result in less time and with less inconvenience for himself and the applicant than when he is compelled to answer the questions of several pages. The protection of the companies lies always in a careful examination, that cannot be regulated by an answer to a number of stipulated questions, but the extension of which in certain directions must be left to the discretion and judgment of the physician, to meet the requirements of the special case. It is, therefore, the examination itself, and the auxiliaries employed in it, that have to be considered, if not capable of an amelioration. The transfer from the agent to the physician, to ask all the questions pertaining to the history of the applicant, is very appropriately stated in the article of the REPORTER. Besides the unpleasantness arising to the applicant in some cases, to state details of his former life to the agent as a layman and a stranger, it is often very important to know exactly what kind of disease the party has had in former years.

In cases where pulmonary deposits have already been formed, or a phthisical catarrh of the alveolæ and finest bronchioles, with the usual consequent symptoms, has made its appearance, the diagnosis by percussion and auscultation is an easy matter for the examiner. Such cases, however, are seldom presented, as the manifestation of the disease is mostly within the knowledge of the individual. But in practice we frequently meet with persons who have a more or less delicate complexion without being unwell. They may be liable, once in a while, to a slight catarrh of the air passages, which passes off again without leaving any traceable sequelæ. We can observe no loss of strength, weight or appetite; the party may have a good family record. The examiner hesitates to decline the applicant absolutely, when he presents himself at the time of his catarrhal affection, proposes a second examination, and finding him well after a week or two, recommends him for insurance. We have no positive means, neither by physical examination nor by symptoms, to decide if the above quoted instance is of a merely transient character in a sound person, or due to the incipient stage of phthisis, when there will be a repetition of its occurrence, with the following order of well-known symptoms. In the very earliest stages of the commencement of phthisis, one single observation and examination renders it sometimes very difficult to form a judgment upon the nature of the otherwise harmless affection. If in such cases we use the spirometer, and apply it properly, we avail ourselves of an auxiliary help to diagnosis which is not to be under-estimated. But it is not the simple application of the spirometer, without any further consideration, as I have already advocated in a former paper.* We have to calculate first the physiological capacity of the lungs of the person presented for examination, as no average standard exists, and the physiological figure has to be calculated for each single individual. The first use of the spirometer with this object in view was made by John Hutchinson, who was also the inventor of the first instrument of this kind answering scientific demands. Previously, only unsuccessful efforts had been made, proving perfectly unreliable, owing to inaccuracy of the instruments. So Kentisch† made patients expire into a graduated bell; Abernethy,‡ into an overturned glass, which was filled with water. Hutchinson published his exten-

* Value and Utility of the Spirometer for Life Insurance Companies. Baltimore *Underwriter*, August 20th, 1874, reprinted, New York *Medical Record*, October 15th, 1874.

† Kentisch: an account of baths, with a drawing and a description of a pulmometer. London, 1811.

‡ R. Laennec, Traité de l'Auscultation médiate, 3 ed. Paris, 1831, vol. I.

sive investigations in 1846,* and drew very soon the attention of the profession to his researches. He declared the vital capacity mainly dependent upon height, weight, and age, and was followed by Simon,† who confirmed his statement, especially regarding height, and brought two more factors into consideration, viz., the circumference and expansion of the chest. Later investigators, such as Wintrich,‡ who examined over 3500 individuals, Schneevogt,§ and others, eliminated the weight as one of the main factors of calculation, on account of its variability, and Wintrich stated the influence of the age on the spirometrical capacity more precisely. We will arrive at a very good and reliable figure, when we make the height, age, sex, circumference, and expansion of the chest the basis of our calculation. Age comes less into consideration with life insurance companies, as the highest capacity with the least deviation pertains to the age between 20 and 40 years, the age when the majority of the people present themselves for insurance. The other four factors are easily determined at the examination, and the insurance companies can very well furnish tables to each examining physician, which enable him to calculate the normal physiological capacity belonging to the respective individual. If the circumference or expansion exceeds or remains under the normal figure, the correction can be made without difficulty. Already Hutchinson, who examined a great many persons suffering from lung diseases, and still more Wintrich and Schneevogt, pointed out the value of the spirometer for examination of soldiers to be enlisted in the army, and mainly for life insurance companies. Hutchinson relates the interesting case of a gentleman, who, examined by him for the first time, was in perfect health, and had, with a height of 209 centimetres,‖ and a circumference of the chest of 117.5 centimetres, a capacity of 7118 cubic centimetres.¶ Two years later, the patient was examined by two experienced physicians, who could not detect any disease of the lungs, and the spirometer indicated only 5040 centimetres. Not quite a year later, he died from phthisis. Almost all the writers on this subject agree, that if the spirometer is used in the manner above described, it often indicates the incipiency of phthisis, where percussion and auscultation cannot reveal the disease yet. With these remarks, it is not desired to say that the physical examination is less necessary or loses any of its value; on the contrary, percussion and auscultation always remain the main help to diagnosis; but in cases where they fail to give proof of disease, the deficiency from the physiological capacity, indicated by the spirometer, ought to rouse our suspicion and attention, and induce a renewed, perhaps more careful examination, before deciding about the case. According to the unanimous consent of all investigators, the deviation from the normal figure, under ten or fifteen per cent. of the physiological capacity, allows us to assume the probability of an existing, although latent disease, whilst a decrease of twenty per cent. gives almost certainty. Over ten per cent. deviation from the normal mean should always raise our attention. Hutchinson says that the loss in the first stage of phthisis amounts from 10 to 50, in the second from 50 to 85 per cent. of the physiological figure. To conclude with an example from my own practice, a patient staying little over four months at my Sanitarium, showed, when he came, 2050 centimetres. He had suffered from hæmoptic night sweats, troublesome cough, fever to a slight extent, and was very weak and not able to walk any distance. Although not entirely recovered, yet he has now not only gained considerable in weight and strength, and is able to walk almost as well as any sound person, but also, his appearance and complexion are natural, and his cough has almost disappeared, especially when he is at rest. Percussion and auscultation do not detect any abnormal status, his family record is good, and if he would be anxious to obtain a life insurance, and would conceal his former disease, he might be accepted. If we take the spirometer in hand, we find that he has 3200 centimetres (a gain of 1150 centimetres), but according to his height, of 178 centimetres, and the circumference of his chest, of 89 centimetres (expansion in accordance with the standard figure of 178 centimetres height), he ought to have 4050 centimetres. He has, therefore, 850 centimetres less than his physiological figure. That similar

* John Hutchinson on the Capacity of the Lungs, etc. *Medico-Chirurg. Transact.*, 1846, vol. XXIX.

† *Gust. Simon.* Uber die Menge der ausgeathmeten Luft bei verschiedenen Menschen. Giessen, 1848.

‡ *M. A. Wintrich.* Krankheiten der Respirations organe. Handbuch der speciellen Pathologie and Therapie, Bd. V, Abtheilung 1. Erlangen, 1854.

§ *Voorheim Schneevogt.* Ueber den practischen Werth des Spirometers, in der Zeitschrift fuer rationelle Medizin Neue Folge, Band v.

‖ 12 inches English measure equal to 30.48 centimetres.

¶ 1 cubic inch equal to 16.4 cubic centimetres.

cases frequently present themselves to life insurance companies, can scarcely be doubted, from the high number of deaths, as well as from the short time of the insurance, in some cases. To my knowledge, the spirometer has once before been used by the companies, but was given up, as not yielding satisfactory results. If the companies are willing to apply the spirometer in the manner set forth above, it will not fail to be a reliable and useful means of confirming or detecting the disease in question, and so save the companies losses which otherwise may fall to their share.

EXPERIENCE IN HYPODERMIC MEDICATION.

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Within the last two or three years, in a frequent interchange of opinion with professional brethren, I have noted the fact that quite a large proportion have little or no experience with the hypodermic method of administering medicines; many of them having never given it a single trial, and a few manifesting a decided antagonism to its adoption.

My experience with the hypodermic method of administering remedies has been fully up to the prompt performance of my requirements. In a series of years these demands have been by no means few. That it is entirely free from danger, I deny; while, at the same time, I aver that its dangers are no greater, where the proper precautions are used, than those experienced in the administration of remedies by the mouth or rectum. My experience leads me to conclude that a resort to the hypodermic method is justifiable, and urgently demanded when, from irritability of stomach, or some other cause, our remedies cannot be taken in the usual way; when, from delirium, suicidal intent, or obstinacy, our patients refuse to attempt to swallow; in cases in which we want a prompt effect; when medicines given in the ordinary way fail to do their work, and where we wish an instantaneous, or almost an instantaneous, effect of a drug.

I have never resorted to the hypodermic use of nutritious substances. My operations have been principally confined to the relief of pain, insomnia, and violent nervous symptoms. The hypodermic syringe is familiar to most physicians, and needs no description here. The graduation of the cylinder I do not regard as of the first importance, but I find it of great convenience in practice. While some authorities tell us there is little pain produced by the insertion of the tube, my experience justifies the belief that considerable nerve is required to endure the ordeal. I have, on different occasions, where the instrument had to be used several times during the same day or night, inserted the tube into the point first punctured. But I do not regard this as good practice.

My custom has been to have my medicinal agent dissolved in as small an amount of water as possible, so as to have the greatest attainable result, with the least probability of inflammation or abscess from a deposition of a foreign substance in the cellular tissue. My point of selection has been, as a rule, the insertion of the deltoid; occasionally I have chosen the thigh.

Sulphate of atropia and sulphate of morphia I mention, in their relative importance, as the remedies which have given the best results in my hands. The latter has always seemed to me less prompt than the former. I have no doubt as to the result in case the atropia itself were used, but the ready solubility of its sulphate in water is an advantage which should not be overlooked. One grain of sulphate of atropia, dissolved in sixty drops of water, and kept in a securely stoppered bottle, makes a supply sufficient for a great many injections; and, in cool or cold weather, undergoes no appreciable change from the growth of fungi, decomposition, or flocculent deposit. I usually placed thirty or forty drops of this solution in my syringe, introduced the tube, after I was sure every particle of air was excluded from the instrument, then, by a motion of the syringe from the right to the left, and from the left to the right again, I caused the point of the tube to lacerate the cellular tissue so as to form a small cavity to receive the injected fluid. This last procedure was designed to prevent the escape of the solution around the tube, at the point of entrance. Of course, inserting an instrument filled with such a powerful fluid into the patient's arm is a procedure demanding very careful manœuvring on the part of the physician; for a sudden movement might throw into the fibro-areolar tissue such a quantity of the atropia as to destroy the patient, or at least give occasion for serious apprehension. This accident has always been guarded

against, on my part, by pushing down the piston rod by a very slow rotary motion, watching the cylinder carefully all the time, so that the required number of drops, and no more, should be given. This is why I regard the graduation of the glass cylinder of so much importance.

Where I have reason to believe that one injection will not suffice, I do not withdraw the instrument, but allow it to remain in position; by sitting near, the patient can be prevented from serious accident, and can receive a second, or even a third dose, and be spared the pain of a reinsertion of the sharp tube, which I regard as of some importance, especially with a nervous patient. My commencing dose of sulphate of morphia has usually been one-fourth of a grain for an adult; but I believe one-eighth of a grain would be safer and better. Two drops of my solution, representing the one-thirtieth of a grain of sulphate of atropia, constitute the dose with which I have, ordinarily, heretofore, begun the treatment of any case. I have no experience with hypodermic medication in the treatment of the diseases of children; my subcutaneous injections have all been limited to adults. On more than one occasion have I given, hypodermically, the large dose just mentioned, and repeated every half-hour until a second and a third dose had been inserted; yet this large amount, in all the one-tenth of a grain, produced no alarming symptoms, but yielded the happiest therapeutic results. The patient who endured these heroic doses was one in whom, from frequent repetition of the agent, there seemed to be established an unusual tolerance of this alkaloid. In all cases, and under all circumstances, I watch the pupil carefully, and inquire frequently whether there is any dryness or stiffness of the mouth and throat; and when there is the least dilatation of the pupil, or complaint of constriction of the throat, I deem it prudent to withdraw the instrument.

The case to which I have just referred was a very interesting one, and I will give some of its details. My patient had been, for a long time, quite an invalid; and had been treated, at different times, for pleuritis, pneumonitis, hysterical vomiting, and insomnia. On one occasion she was suffering great pain, and could retain nothing when administered by the mouth; a resort to the sulphate of atropia seemed my only resource, and it was given in the usual way, with an interval of half an hour between each dose. Very soon after the third dose had been given, I was alarmed by the sudden supervention of aggravated symptoms of poisoning from belladonna. There was a convulsive movement of the whole body, the jaws and mouth became tremulous, the face, which a moment before was pale enough, assumed a red, then a livid hue, accompanied with tumidity; the pulse became very rapid and seemed finally lost at the wrist; in fact, there seemed to be a total prostration and paralyzation of all of what the ancient physiologists termed the vital functions. The case seemed hopeless enough.

Fortunately, I had with me a quantity of sulphate of morphia, and having faith in its antidotal powers, I speedily dissolved something over one-fourth of a grain in a little water, and threw it into the arm. I soon had the joy to discover the pulse assuming its wonted work at the wrist, and my patient returning to consciousness. This was the only bad result I have ever witnessed; but it taught me a lesson.

I am confirmed in the belief that small doses are better than large ones. It is far easier to repeat a small dose than to combat the mischief done by one too large. One drop of my solution, representing one-sixtieth of a grain of sulphate of atropia, is the dose I now prescribe in a robust adult patient; in half an hour I would repeat, if there was no palliation of pain or other unpleasant symptoms, and in one hour from the second injection would throw in a third one, if necessary. I would diminish this quantity if I thought the indications demanded it. But the frequency of the dose must be regulated by the urgency of the peculiar symptoms in every case. A little preliminary treatment is sometimes required. An emetic to evacuate the stomach just after a full and hearty meal, or an enema to unload a distended rectum, might, very properly, in many cases, precede the subcutaneous use of the anodyne; but I imagine the cases are few indeed in which the medical attendant is compelled to waste precious time in this way.

Emetics, tonics, oxytocics, nutritive substances, all these, and doubtless many other remedial agents, may be given subcutaneously; but I have never met with any cases which I thought demanded their use in this manner.

I remember once being asked, by a very able physician, what advantage the hypodermic method possessed over the old methods of administering medicines. Need I point to hys-

terical vomiting and aggravated cholera morbus; to the agonies of neuralgia in its manifold forms, to threatened miscarriage, with its frequent accompaniment of irritable stomach and throbbing brain, to cholera itself, and many other affections, and note the promptness with which they so often yield to hypodermic medication, to answer this question?

Quite recently I was called to see a young woman in about the fifth month of her first pregnancy, who was threatened with miscarriage. She had quite a violent fever, a severe headache, an irritable stomach, and constipated bowels, with frequent recurring uterine pains. Opium and its preparations, bromide of potassium, creasote, subnitrate of bismuth, the rectal syringe, all failed. Two or three, at furthest, of the drop doses of my solution of the sulphate of atropia, gave her complete relief. She passed a comparatively comfortable night, had an alvine evacuation next morning, and in a few days was well enough to visit me at my office.

At another time, I was called to see a patient suffering from an attack of neuralgia of the cardiac orifice of the stomach. The attack was unusually severe and refused to yield, as on former occasions, to the ordinary remedies; the sulphate of atropia did not disappoint my expectations in this case.

But it is needless to multiply cases. I have given only a few out of the many instances in which I have resorted to the hypodermic method, and almost, if not quite, with invariable success. I would feel lost without my hypodermic syringe, and is it any wonder that I should be warm in my eulogy of hypodermic medication?

Hospital Reports.

PENNSYLVANIA HOSPITAL.

CLINIC OF PROFESSOR DA COSTA, DEC. 4th, 1875.

REPORTED BY FRANK WOODBURY, M.D.

Autopsy of a Case of Intra-cranial Hæmatoma, Occurring in the Course of Chronic Bright's Disease.

Gentlemen:—I will first call your attention to the post-mortem results of a man who was admitted to the hospital in a dying condition, and who, indeed, never really came under my care, as he expired before I saw him in the morning. His name was ascertained from papers found in his possession, from which it was also learned that he was a laborer, of Scotch extraction, and was probably about forty-eight years of age. The only history that could be obtained was that he had been found at night on the street, insensible, and was brought to the hospital in that condition. He was unable to give any account of himself; his breathing was stertorous, and, in fact, he was in a comatose state. His left pupil was dilated, and did not respond to the light; the right appeared of about the normal diameter, but contracted feebly. The pulse, when he was admitted, was 80, but soon afterward it was noticed that it had fallen to 68. The respiration was labored, the inspirations being twenty-four to the minute. His axillary temperature was 95° F. There was no external evidence of injury, and the face was not much congested. Stimulants, warm applications, turpentine enemata, and all the other efforts to promote reaction failed; even the hypodermic injection of four minims of tincture of digitalis, resorted to by Dr. Hopkins, the resident physician, as a cardiac tonic, was also ineffectual, and the patient died about 7½ o'clock yesterday morning. It should be mentioned that his bladder had been emptied by a catheter when he was first brought in, and the urine was found to be albuminous.

The specimens are before you. You will observe that both kidneys are contracted and that they contain cysts; they well represent the condition known as "the contracted kidney." Now, when you examine such a kidney closely, you will notice first that the organ is smaller in size than in health, and, secondly, that the capsule is contracted and adherent. On section the secreting portion of the gland is seen to be diminished, and masses of exudation may be discerned, which encroach upon and surround some of the pyramids, causing atrophy of their structure. The organs are not fatty, and on applying a drop of tincture of iodine we do not observe the peculiar reddish brown discoloration which denotes and constitutes the test for the presence of amyloid or albuminoid degeneration. The disease is, therefore, the simple contracted or granular kidney of chronic Bright's affection, and occurring in this case of brain trouble is of special interest, because it is preëminently the form of Bright's disease which is apt to be associated with apoplectic effusion. The same general principle underlies both conditions; there is a similar disease of the fine blood vessels of the brain, and of the renal vascular system, connected and coincident.

On looking at the brain we find that a large clot, weighing four ounces, existed on the left side, on the surface, compressing the left hemisphere anteriorly, extending somewhat toward the base of the brain, and coming apparently from the meningeal vessels. The vessels of the membranes were swollen and distended with dark blood. The brain substance was not congested, nor was it softer than normal; but the left side had been so much compressed that the walls of its lateral ventricle were in contact with each other. There was also some reddish fluid in the ventricular cavities.

Now, I have already told you that this form

of contracted kidney is the form that gives apoplectic seizures; but it is also the form that is especially liable to be complicated with uræmia. This was, in the case before you, a very nice point of diagnosis—to determine, when he was brought insensible into the hospital, with stertorous respiration, albuminuric, and comatose, whether this was due to apoplexy or uræmic convulsions. In this connection, the temperature report is significant. You will remember that his axillary temperature on admission was only 95°, therefore several degrees below the normal temperature, which may be considered as 98.6°. This condition of the bodily heat, occurring in a case of what may be called a stroke, if you please, favors the view that it is apoplectic. When cerebral apoplexy occurs, the temperature of the body becomes greatly depressed, and remains so for some time. If the patient live, as he improves the thermometer rises steadily, until it gets a degree or two above normal, where it will remain for a considerable period; should a fresh effusion occur, it will fall as before, to repeat the same course if life continue. This is a point that can be turned to good account in doubtful cases. It is important, because, upon the diagnosis depends the treatment, and on your prompt recognition of the cause of the convulsion may rest the life of your patient. What would be eminently proper for a man with a clot in the brain, might prove fatal to a person suffering from uræmic poisoning of the blood. The course of treatment in each case is radically different, but I will not dwell upon it, as the patient did not come under my care; I merely brought the post-mortem results before you to illustrate certain points of pathological interest connected with it.

Brain Tumor vs. Chronic Meningitis.

The next case brought before you is full of knotty points, and is one the discussion of which will bring before you some of the obscure points in the diagnosis of brain disease. The man's statements are confusing and confused, but this is part of his disease, he cannot help it; at the same time it makes deductions from his statement unreliable. His memory is somewhat impaired and he recalls incidents with difficulty, but the chief points in his history are as follows: His name is Joseph S., a sailor, of American birth; he is thirty-nine years of age. He is, apparently, a robust, plethoric man, whose health has been generally good. He has always been a drinking man; on only one occasion, however, had he any symptoms of mania-a-potu; this was about ten years ago, and was merely a light attack of delirium-tremens after a debauch, which lasted only one day. He persistently denies venereal disease, but states that, about five years ago, he had a non-specific discharge from the urethra for a few days, following a contusion of the perineum. Eleven months ago he was in good health, apparently, and was standing on the deck of his ship, when he suddenly found himself unable to speak; this condition continued about ten minutes, and then passed off entirely; while it continued he was neither unconscious nor paralyzed, although some papers that were in his hand at the time fell to the deck. He continued at his work, although the attacks recurred several times during the succeeding six months, but at no time had they been accompanied by pain in the head, or other bad symptoms; he was in his usual health. But in May last he had a severe pain in his head, lasting two weeks, for which he entered this hospital for treatment, where it was then regarded as a supra-orbital neuralgia. He was discharged, well, about the first of June, but the pain returned a month later, and he has had more or less of it ever since, although not as severe as the first attack. About one month before his readmission, he had a tonic spasm of the muscles of the right forearm and hand, which lasted only a few minutes, but since then he has noticed a feeling of numbness of the right hand, as if it were asleep, and some weakness in the right leg. His second admission was on the 7th of November, when he complained of frontal headache, not limited to one side; constant "hissing," or tinnitus in the left ear, with some pain, which was found on examination not to be due to any ordinary local cause, as the tympanum appeared to be normal, and there was no impaction of cerum. He had curious sensations, suggesting impaired innervation, the skin of the face felt as if it were drawn tense, the jaws seemed, at times, stiff, as if he had locked-jaw, and his tongue felt as if it were too large for his mouth, but he never bit his tongue or his lips when chewing his food. There were no symptoms of facial paralysis. He answered readily at first, but seemed to hesitate for words if the questioning was prolonged. Occasional flashes of light appeared in the right eye, with temporary dimness or loss of vision; he had lost the power of sight in the left eye since 1862, without any history of previous injury or inflammation of the organ. Examined with the ophthalmoscope, the left eye was found to be cataractous; in the right, the optic disc was very much swollen and prominent, with minute hemorrhagic spots on its surface; the arteries were notably lessened in size, the summit of disc seen with a No. 10 glass; the macula was emmetropic. In short, a choked disc existed in the only eye whose fundus was accessible, indicating disturbed cerebral circulation. To this may be added a statement made by him of having about six years ago received a blow on the left side of his head by a block falling from aloft, which knocked him insensible to the deck, and produced a wound that kept him in bed for three weeks. A depression can be felt at the spot indicated, situated in the vicinity of the coronal suture and about two inches from the border of the squamous portion of the temporal bone. About an inch in front of this may be seen the scar left by a stab from a knife, made five years ago.

He also states that he had two epileptic convulsions eighteen years ago, but has had none since. He never has vertigo, does not stagger when walking, and can walk or stand with his eyes closed. His urine examined was found to be normal.

This is a conflicting history; there is an account of two isolated attacks simulating epilepsy, eighteen years ago, affecting principally the right side; but since that time he has been struck on the head, with possible fracture of the skull. Let us add to this that the grasp of the right hand is defective, and the right leg does not seem to have much power. Tested with the battery, the electro muscular contractility and sensibility are not so marked on the right side as on the left, but the muscles do respond alike in the arm and leg. Now, what is the matter with the man? His statements could not be fully relied upon; we, therefore, called in the aid of the ophthalmoscope, which revealed a choked disc, and demonstrated the existence of intra-cranial pressure, for this is the most that we can assume it to mean. The papilla was bulged out, and its vessels were almost obliterated, showing obstruction to the circulation, and it is an interesting point for consideration whether or not the cataract in the left eye may not be connected with the same cause, and produced by impaired nutrition.

Examining into the probable nature of the lesion, we find embolism excluded by the fact that the heart is normal; there is no disease of the kidneys; and everything that could act on the brain is negative. The diagnosis thus narrows down to one of two conditions, between which it is difficult to choose, on account of the history. There may be present either chronic meningitis, affecting principally the left side of the cerebrum, or brain tumor. It is hard to decide between these two conditions; I incline to the meningitis, but am by no means set in my opinion. Reviewing the symptoms, we find that this man has had some confusion of ideas, anomalous attacks of temporarily impaired faculties, of severe and afterward constant pain in his brow, of actual one-sided loss of muscular power, as tested by the grasp and the battery, of interfered speech, and choked disc—all signs of pressure upon the brain; but they may happen in either meningitis or in the course of a tumor, so they do not help us much. But what I do consider of importance is this point.

With a tumor large enough to give this group of symptoms, there should be frequent epileptiform convulsions and severe steady headache. It is not so here. He has had no convulsions lately, nothing but evidences of disturbed circulation and loss of power. The absence of marked headache, epileptic seizures, and vertigo, are important points against the hypothesis of a new growth. Again, one-sided loss of power adds additional weight to this view, for hemiplegia is generally considered as conclusive evidence against the existence of a tumor. Besides, there is no cause to lead us to suspect such a condition. There has been no syphilis; this has been carefully inquired into, for this is the usual cause of brain tumor in young people; and he is not old enough to be subject to the forms of cerebral disease that occur late in life. The idea of meningitis seems then to be more tenable. It is a remarkable fact that a tumor is unattended by mental aberration; as a rule, the mind remains clear till the closing scene (always excepting, of course, those cases of cerebral cancer attended by great destruction of brain substance). Mental phenomena do not characterize an intra-cranial growth, but generally do attend the course of inflammation of the meninges.

You ask me, why not speak of the blow on the head? Because I am obliged to say that we cannot accept the history as conclusive; we can take the general facts, but must not depend too much on special statements. I have discussed, at some length, the evidence of increased intra-cranial pressure, the loss of power on the right side, and the peculiar mental state of the patient, as being the leading features in the case.

In regard to the treatment, he has been taking ten grains of iodide of potassium, morning, noon, and night, since his admission into the hospital; this dose shall be now increased to twenty grains, and blisters shall be applied to the back of the head and behind the ear. The bowels shall be kept open by Rochelle salt, and he shall have a nourishing diet, without any stimulant whatever; in other words, a strong alterative regimen. This will fall in with the diagnosis. If it is a case of meningitis, it will be improved; if one of tumor, the treatment will do it no harm.

In dismissing the patient, I will mention that this case well illustrates the importance of the ophthalmoscope in obscure cases of cerebral disease; without its aid the diagnosis would have been far less certain than it is.

Cirrhosis of Liver and Kidneys, with Ascites.

This case, although not as interesting as the preceding, is one of a kind that is more frequently met with in practice. His name is Edward F., a sailor, fifty-two years of age. I call your attention to the peculiar tint of his skin, which is very much the color of Addison's disease, but the bronzing is confined to his face; it does not appear elsewhere on his body, and is probably due to exposure to the weather. He has always been intemperate in his habits, but has been healthy, with the exception of occasional attacks of malaria some seven years ago. He never had hematuria or symptoms of acute nephritis, but, about four months ago, his feet began to swell, and he remembers that he was obliged to pass water often. About this time he had an attack of tertian ague, which stopped in a few days under treatment, but which was followed by increased frequency of micturition. One month before admission, his abdomen began to enlarge, his feet were very œdematous, and he passed less water than before. In this condition he was received into

the hospital. His eyes show a slight arcus senilis, more marked in the left than in the right; there is also a corneal speck in the left eye. His tongue is coated in the centre; appetite fair. His pulse is 96, and very compressible. Auscultation of the heart discovers no murmur; the first sound is short and badly defined, the second is sharp and clear. The abdomen is distended with fluid, the superficial veins are swollen. There is very decided fluctuation, showing marked abdominal dropsy. The liver dullness stops abruptly at the edge of the ribs. The splenic area is increased, but it does not extend below the costal border. The feet are moderately swollen and pit on pressure.

You have heard the history of the case; it will be completed by an examination of the urine, which, after standing some time, precipitates a heavy deposit. It contains a moderate proportion of albumen, with many hyaline and a few granular casts; it is of specific gravity 1020, and acid in its reaction. Practicing the test commonly used here, by pouring half a drachm of nitric acid into a test-tube, and dropping the urine upon it along the inside of the glass, you notice a white ring of coagulated albumen at the juncture of the two liquids; this is a very delicate and striking test, of easy application.

Now, what is the matter with the patient? There is some malaria in the case; he says he has had gonorrhœa several times, but never had a venereal sore, so we may exclude syphilis. There is undoubtedly some forms of Bright's disease here, any of which may be complicated with dropsy; but what form, and is this the whole malady? We find here evidence of beginning cirrhosis of the liver, and of a similar condition in the kidney, which, indeed, are frequently associated, and which, in this case, have not, as yet, reached a very high degree of development. He has never had any disease or fracture of a bone, and never had syphilis; we have not, then, to deal with the albuminoid degeneration, and the chances are in favor of its being the contracted kidney of chronic Bright's disease.

The altered hepatic percussion-dullness, the dropsy, which is not general, but is confined to the abdomen, gives a clear and connected statement that the effusion here is not entirely due to the renal affection, but is connected with the liver trouble of a man that admits he has been drinking freely for a number of years. The decreased hepatic dullness, without jaundice, indicates commencing cirrhosis, which is often accompanied by ascites due to obstructed portal circulation. As a rule, when this condition of the liver is present, a corresponding change occurs in the renal structure, forming the cirrhotic, granular or contracted kidney.

This patient has very much improved under the use of the tincture of the chloride of iron, with the solution of the acetate of ammonia, in the combination generally known as Basham's mixture. Of this he has been taking half an ounce three times a day, and it shall be continued. But this is hardly enough; while it improves the general condition and relieves the kidney, it does not strike at the cause; it does not modify the progress of the disease in the liver and kidneys sufficiently. In addition, then, flying blisters shall be applied over the hepatic region, and he shall have alteratives to correct the morbid condition. My first choice would be corrosive sublimate, given in small and steadily-increasing doses; but the man is too weak to bear mercury, as is denoted by the first sound of the heart. Therefore, although I would under other circumstances prefer the other, I will order him ten grains of iodide of potassium thrice daily, with a plain, nourishing diet, consisting largely of milk, eggs and animal broths. He is to have no stimulants, and will be directed to take gentle exercise in the open air when the weather is favorable.

NEW YORK WOMAN'S HOSPITAL.

REPORT OF INTERESTING CASES.

Sloughing of Uterus and Bladder as a Sequel of Labor.

A patient entered the service of Dr. Emmet with the following history:—At the age of twenty-two she was taken in labor with her first child, and about forty-eight hours after the waters ruptured, and a child weighing fourteen pounds was delivered by means of the forceps. The condition of the patient was favorable for two weeks, when she noticed that her urine dribbled away by the vagina. Two weeks afterward, or one month after labor, she passed some large sloughs. These sloughs were preserved by her physician, and, on examination, proved to consist of two masses—one of them consisting of the placenta, and the other the base of the bladder and cervix of the uterus.

At this point the main interest of the case rests, and, unfortunately, it is involved in obscurity. The point referred to is this: Under what circumstances did the accoucheur, after delivering a child of fourteen pounds, neglect to see that the placenta was delivered? The only explanation possible, without gravely impeaching the competency of the attendant, is to suppose that the cord, with a portion of the placenta, came away, and, from causes not explained, the deficiency was overlooked. Another question to be considered is, did the remaining placenta, directly or indirectly, cause the extensive sloughing of the pelvic viscera? This is another question difficult of solution, though, from the time intervening between the labor and the passage of the sloughs—one month—it is fair to assume that the retained placenta did have an influence. When the patient entered the hospital, nearly five months had elapsed, and her condition then was as follows: On placing the patient on her back and separating the labia, a prolapsed fundus of the bladder was discovered. When this was replaced by a sponge probang, no sign of uterus could be discovered. When she was examined

by the rectum, a small nodule was discoverable in the place that should be occupied by the uterus. After a careful examination of the case it was decided that no operation for the closure of the base of the bladder could be successful, from the fact that there was not a sufficiency of tissue. It was then decided, with the consent of the patient, to perform an operation for the closing of the vagina. This was done, and after it was performed the patient enjoyed comparative comfort.

Sarcoma of the Uterus—Removal.

An interesting case entered Dr. T. G. Thomas' service, the recital of which may prove of benefit to some who have similar cases under observation. The history of the case revealed nothing special beyond metrorrhagia. When she was placed on the examining table and the finger carried into the cervix, a mass was discoverable which conveyed the sensation of a wet sponge. This was not cancer of the uterus, for the reason that the uterine probe could be carried around the mass, showing it to be a tumor.

Dr. Thomas diagnosticated it as sarcoma, and said that last winter a similar case came under his observation, which he supposed to be sloughing polypus. He removed it by means of the ecraseur, and found that in doing so he took off one of the horns of the uterus, which had become inverted by the weight of the mass. The patient recovered, notwithstanding. The present case was treated by removal. The growth was fixed by means of a tenaculum, and then dug out by means of the uterine depressor. When it was removed it formed a mass about the size of a pear.

Ovariotomy—Treatment of the Adhesions.

The patient gave the ordinary history of ovarian tumor. The interest of the case rested mainly on the method of avoiding the separation of the adhesions. When the abdomen was opened the cyst was found to be extensively bound down, and the treatment pursued was that which Dr. Thomas had seen practiced in Europe in similar cases. It was as follows:—An incision was made into the cyst after its contents had been removed by a trocar, and the sac turned inside out. It was then cut off and the clamp applied to the pedicle. By this plan the adhesions were removed with the sac and all hemorrhage avoided. It is important to bear in mind to be careful and see that no portion of the intestines adhere to the surface of the cyst, for if so, when the sac is cut away, a portion of the intestines will be amputated. Beyond this there are no other dangers.

Editorial Department.

Periscope.

Hypnotic Properties of Lactate of Soda.

W. Preyer, of Jena, in a communication to the *Centralblatt für die Medicinischen Wissenschaften*, for August 7th, states that numerous experiments and observations have shown him that a feeling of weariness and sleepiness, and even a condition very closely resembling or identical with natural sleep, is produced when a concentrated watery solution of lactate of soda is injected subcutaneously, or introduced in large quantity into the empty stomach, provided that strong irritation of the senses be avoided. In many cases, also, sleep was produced when the lactate of soda was not given as such, but the materials were afforded for its abundant formation in the digestive canal, as after drinking highly concentrated solutions of sugar, and after the abundant use of fresh, and especially of sour, milk, and of sour or sweet whey. There were great differences in regard to the time, duration, and intensity of the sleep. It appeared to occur more readily in young than in old animals; in animals having high than in those having low reflex excitability; more readily in mice, cats, pigeons, and frogs than in rabbits and guinea-pigs; more readily in small than in large animals, and in a low temperature than in a high one. In man, also, considerable individual differences were observed. While one would be seized with almost invincible drowsiness soon after the use of a quart of coagulated milk or a glass of highly concentrated solution of sugar, or after taking into the empty stomach a solution of twelve grammes (three drachms) of lactate of soda in 120 grammes of water, this effect was not produced in another. In order to obtain data for an investigation of the causes of this varying action, Preyer invites practitioners, in cases where it has hitherto been the practice to procure sleep by means of opium or chloral, to inject, subcutaneously, concentrated solutions of lactate of soda, or to give as drink large quantities of solution of sugar, or milk-serum, or condensed milk, and to communicate the result, either in published papers or by letter. He remarks, also, that the lactate of soda deserves investigation as an antipyretic, and also as a calmative in mania and in certain forms of convulsive disease, on account of its property of speedily inducing weariness during muscular action. In all cases where sleep was produced by lactate of soda, Preyer found the respiration deepened and reduced in frequency, the reflex irritability diminished, and, in warm-

blooded animals, the temperature lowered, especially when large doses were given. Larger doses of the lactate than were necessary to produce sleep were borne without the least injury. The sleep produced cannot be distinguished from natural sleep. When the animals awake, they do so in the natural way, become lively in a few moments, readily take food and drink, and, if left to themselves, readily fall asleep again, to awake quite lively. Lactates of potash, magnesia, and lime cannot be recommended as substitutes for lactate of soda.

Paralysis from a Retained Pessary.

At a late meeting of the Obstetric Society of London, Dr. Gervis exhibited a pessary which had been removed from a patient fifty-six years of age. Fifteen years previously, it had been introduced in the vagina to relieve prolapsus of the womb. Four years ago she began to feel a weakness in the lower back. Two years ago her legs became weak, and she was unable to walk without assistance. For six months she has been bedridden. For the last six months she has had discharge from the vagina, occasionally tinged with blood, and highly offensive, She can neither stand nor walk, and is able to move her legs in bed with difficulty, being attacked two or three times during the night with cramp in them. On examination, a large round metallic pessary was found imbedded in the vaginal walls, and was removed by the aid of bone forceps, a considerable quantity of brownish purulent discharge, horribly offensive, escaping. All the paralytic symptoms were relieved after its removal. Dr. Cleveland remarked that, apart from the interest attaching to the long impaction of a foreign body in the vagina, there was the notable fact that a quantity of highly offensive putrid matter must have been locked up for a considerable time, without the supervention of septicæmia. The case tended to show, in connection with the recent debate before the Society, the necessity for the co-existence of some peculiar condition of the general system before absorption of morbid matter, followed by blood-poisoning, could be effected.

Salicylic Acid as a Dressing to Wounds.

At a society meeting in London, lately, Mr. Callender brought forward a series of cases illustrating the use of this agent as an application to wounds. The acid was used in various ways, and the three following preparations were the ones chiefly employed:—*a*. Phosphate of soda, three parts; salicylic acid, one part; water, fifty parts. *b*. Salicylic acid, one part; olive oil, forty-nine parts. *c*, Salicylic acid, one part; bicarbonate of soda, half a part; water, 100 parts. In addition to these, however, it was occasionally used combined with borax, or in the form of an ointment with prepared lard; and a preparation of the acid with mastic and spirits of wine was tried, but had to be abandoned by reason of the irritation caused, as it was thought, by the ingredients combined with the acid. Seven cases in which the acid had been employed were narrated. In three of the cases a vesicular eruption was caused by the acid, and necessitated its withdrawal. In one case it was followed by considerable local irritation, which was relieved by the withdrawal of the acid. In a case of excision of the elbow-joint for strumous disease, the wound was washed out with salicylic acid, and was dressed with solution "*a*" on Japanese paper. There was considerable discharge from the wound, and the granulations were pale and flabby; the dressing was after a time changed to carbolic acid, when the granulations became florid, and the discharge was reduced to a minimum. In the remaining two cases the wound healed rapidly under the application of salicylic acid. From these cases, and from other observations, Mr. Callender arrived at the following conclusions:—Putting together its good points, he found that salicylic acid was free from odor, and so far was acceptable to the patients; that wounds healed under its influence, and, during the progress of the repair, were free from bad smells; that, unless strong with spirit, or but little diluted, it did not cause local pain. Its bad points seemed to be these: That, above the strength of two per cent., it caused local irritation, with some constitutional disturbance; and if the patient had a delicate skin, even the weak preparation was a source of trouble; that there was more discharge from a wound dressed with salicylic than there was where carbolic acid was used; that its influence upon a recent wound, as after an operation, was not efficacious against the occurrence of decomposition as was that of carbolic acid, chloride of zinc, or of boracic acid; that the repair of a wound was less active, and the granulations, if any, more flabby than when other simple or antiseptic dressings were employed. On the whole, while admitting its use as a local application to be fairly commendable, Mr. Callender thought it inferior in its antiseptic properties to other agents, and did not consider it to be a remedy meriting the strong recommendations which had been given it by some of those who had made trial of it.

The Management of Cerebro-spinal Meningitis.

In the *Peninsular Journal of Medicine*, Dr. J. J. Mulheron remarks:—

During the epidemic prevalence of cerebro-spinal meningitis I noticed that when the cerebral trouble began to abate there was a simultaneous improvement in the abdominal symptoms, and, taking the hint from this, I have, for the past two years, adopted a line of treatment which I have had no reason since to modify. I will not here discuss the occurrence of cerebral complications as a sequel to the abdominal disorders of children, and the *modus in quo* of this occurrence. Suffice it to say that a neglected

or improperly treated diarrhœa is most prone to result in grave cerebral complications, and in the cases we are called to see these complications have, in the great majority of instances, supervened. What then is to be done under such circumstances? At once apply suitable counter-irritation—either mustard or cantharides—to the nape of the neck, and administer a combination of ergot, bromide of potassium and belladonna. If the head symptoms are very persistent, do not hesitate to apply a bladder filled with pounded ice. This may sound somewhat heroic: but, gentlemen, what is done must be done decisively; be sure you are right in your diagnosis, and go ahead.

On Idiopathic Tetanus.

At a meeting of the Clinical Society of London, Dr. Southey related a case of this disease:—

The patient, a railway ticket collector, well nourished, aged twenty-one, came into St. Bartholomew's Hospital. Fourteen days previously, he had remained for some hours in wet clothes, two days after which tetanic symptoms had supervened, and had been treated, without apparent improvement, by moderate doses of chloral. On being seen at St. Bartholomew's, he was sensible, able to move his arms, unable to move his legs, and had trismus. His skin perspired freely. Temperature 100°, pulse 120, respiration 40. The muscles of certain regions felt hard, and were tender. Attacks of opisthotonos, lasting from two to five minutes, came on about every hour. The bowels were confined; the urine was scanty and high colored. Fluid food only had been given. The treatment after admission consisted of one pill of calomel and opium, followed by a mixture of bromide of potassium (one drachm) and conium juice (two drachms), to be taken every three hours. Stimulants were discontinued, and the diet consisted only of iced milk alternately with beef-tea. Great quietness was enjoined. The skin of the body was hypersesthetic, and exposure to draughts of air excited the tetanic spasms. For the first three days the bowels did not act, and the spasms increased in violence and frequency. He was then ordered thirty grains of compound jalap powder, to be repeated every three hours until the bowels acted, and he was to be put into a bath, temperature 98°. Three doses of the powder had to be given. After the bowels were opened, the trismic spasm was lessened. On the fifth day, the bowels acted four times copiously; temperature 98°, pulse 120, respiration 30. On the sixth day three attacks of tetanic spasms occurred, after which the patient steadily improved, and no further spasms were observed. No wound or splinter could be found upon the patient's body after most diligent search. The invasion of the disease, as well as its declension, was gradual. The improvement coincided with the evacuation of the bowels. Purgatives have been highly commended in tetanus, the normal peristaltic action of the intestines being invariably arrested so long as the spasms are severe and continuous, and returning coincidently with the cessation of the spasms. But Dr. Southey did not think this indicated the administration of purgatives, which he considered might produce damage precisely as excitation of the cutaneous nerves was harmful. He had given the compound jalap power, almost against his own will, when, perhaps, the bowels would have been naturally opened without its aid. The tepid bath was employed daily, sometimes for nearly an hour, and had a marked tranquillizing effect. Bromide of potassium was commenced only on the thirteenth day of the illness—which date, if cases of tetanus survived, they often recovered; but the drug seemed to be specially indicated physiologically for the disease. Dr. Wood had recorded the results of treatment by its means in sixteen cases—nine of traumatic tetanus—all of which recovered; and seven of idiopathic tetanus, with five recoveries.

The Management of Abortion.

Dr. W. D. Hazzard says, in the Virginia *Medical Monthly*:—On being called to a case threatened with abortion, my invariable rule of practice is first to ascertain as nearly as possible the stage of the pregnancy, frequency and the extent of the pains, the amount of hemorrhage, the cause, if known, that has induced the symptoms present—whether they be habitual, or accidental, immediately predisposing or exciting. Having elicited all the information I can from the patient or her friends, I then institute an examination per vaginam. If I find the os uteri dilated and flaccid, with expulsive pain at the menstrual periods, whether attended with hemorrhage or not—if the os be dilated to any considerable size, I regard the case as of doubtful character and make my prognosis accordingly. But if I find the os uteri firm and undilated, even if I find hemorrhage attended with severe pain, I regard the case more favorably; and if the other symptoms warrant the belief that the fœtus be living, I make the effort to save the conception. I endeavor to bring my patient as speedily under the influence of opium as possible. Having done this, I endeavor to keep her under the influence of the drug as long as any symptoms remain of pain or hemorrhage—experience having taught me that many cases may be carried to a favorable termination that under a more temporizing treatment would result in miscarriage. I am thoroughly convinced that many cases of abortion are caused by nervous irritability of the uterus, resulting in an intolerance to the presence of the fœtus in the womb; hence nature endeavors to rid the organ of its contents by expulsive efforts. If this irritability be overcome by the free and full administration of the sedatives and narcotics, the pregnancy may oftentimes be saved.

I do not think authorities have laid stress

enough on the importance of thorough investigations in such cases as I have spoken of, to enable the practitioner to make a clear diagnosis. Neither do I think they attach sufficient importance to the wonderful powers of opium, administered with the view of procuring its full effect. In my hands, it has seldom disappointed my expectations.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The Leavenworth *Medical Herald* will be discontinued after January 1st.

——The *Scientific American*, now in its thirty-first year, enjoys the widest circulation of any weekly newspaper of the kind in the world. A new volume commences January 1st, 1876. The contents of the *Scientific American* embrace the latest and most interesting information pertaining to the industrial, mechanical, and scientific progress of the world; descriptions, with beautiful engravings, of new inventions, new implements, new processes, and improved industries of all kinds; useful notes, recipes, suggestions, and advice, by practical writers, for workingmen and employers, in all the various arts. Every number contains sixteen large quarto pages. The year's issue contains 832 large pages, at a cost, including postage, of only $3.20 a year to the subscriber.

BOOK NOTICES.

Transactions of the American Otological Society. Eighth annual meeting. Vol. 2. Part 1. pp. 96. James Campbell, Boston. 1875.

This report on the progress of otology is presented, as was that of the preceding year, in two divisions, viz.: Part I, including Anatomy and Physiology, by Dr. C. J. Blake, is most valuable, because no less than fourteen of the articles contained therein are translations from the original sources. Part II, including Pathology and Therapeutics, by Dr. A. Mathewson, is just half the size of the first division, and contains some interesting matter, notwithstanding much of the material has already been made available to the profession through the various American journals.

It is as Dr. Blake says, "This report is intended simply as a report on the Progress of Otology, and not, as Prof. Jacoby has, in his (hypercritical) reviews in the *Archiv. für Ohrenheilkünde*, taken the liberty of considering that it should be, a critical review."

We were disappointed by the great scarcity of original contributions, there being but nine, with one exception very brief and unsatisfactory articles, and for these but six members were responsible.

The most elaborate paper was that by Dr. Albert H. Buck, of New York, on "Eustachian Bougies," where he cites fifteen cases, with varying results, which do not go to prove that either the solid stick or strong solutions of nitrate of silver are ever advisable when applied directly within the Eustachian tube. Another contribution is termed "Intra-tympanic Pressure during Phonation," by Clarence J. Blake, M.D., with experiments and illustrations after those of Dr. Henry J. Bigelow, who has given rules for practice in phonation; these enable the patient, by varying the pressure in the buccal cavity in cleft palate, to increase the clearness of articulation. Another is a case of "Angioma of the Lobule of the Ear," by Dr. C. J. Kipp, of Newark, N. J. "Aural Contributions," by Dr. George Strawbridge, of this city, and we are only sorry the doctor was so economical with his usually interesting material. "Multiple Abscesses of the Auricle," and an interesting case of "Otitis Media Hemorrhagica," by Dr. O. D. Pomeroy, of New York city. "Remarks upon the Early Treatment of Ear Affections;" a hint that aurists, above all others, should not require. An interesting case of "Purulent Infection (Pleuro-pneumonia) from Suppuration of the Middle Ear," and "Experiments on the Effects of Quinine upon the Ear," by Dr. D. B. St. John Roosa, of New York city, with whom we cannot agree, and certainly we cannot deduce, from his experiments, "that tinnitus aurium and impairments of hearing, following the use of quinine, depend upon congestion of the ultimate fibres of the auditory nerve in the cochlea, and that the redness of the drum-heads is merely an index of the former condition." Better say large doses of quinia may tend to a temporary aggravation of previously existing tinnitus aurium.

THE

Medical & Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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D. G. Brinton, M.D.,
115 South Seventh Street,
Philadelphia, Pa.

1876.

With this number we commence one of those years in our country's history which will long stand out as landmarks on its records. The daring experiment our forefathers inaugurated has been tried, and has proven successful. Not America alone, but the whole world, has partaken of the fruits of their labors; not only the interests of political life and social relations, but those remoter ones of applied science and abstract thought.

To one branch of this narrower field, namely, to the reaction of individual liberty on the study of science, we would more especially call attention. Freedom of life has led to freedom of thought, to untrammeled research, to unbiased deduction, to a sound and true philosophy.

Hand in hand with the ancillary sciences, that of medicine has progressed from the brief details and unfruitful empiricism of a hundred years ago to that wealth of resources and wide-reaching connections which mark its study now.

This astonishing change, wrought in a space of time spanned by a single life, is what should fix our attention for a while in this year. To this end the profession of the United States ask their fellow-workers from abroad to assemble by delegates in this city, here to reflect on the inspiring lesson of the past, and to lay broad the foundation for a second century of yet more productive activity, yet nobler usefulness.

The details of this plan are known to our readers, and it is needless to rehearse them. Let us rather say a word of the genuine value of halting from time to time on the journey of life to exercise that human prerogative of "looking before and after." How healthful it is to the individual to give an occasional solitary hour to a review of his past efforts, to a comparison of his present with his former self, to a re-estimate of his capacities, his possessions, and his chances for the future! So it is with a nation. It is not the season for a false adulation, but for taking a correct "account of stock." Much we may justly boast of; not a little we may properly regret; and yet more there is to provide against.

In medical science many a method now in vogue will be forgoten in a decade; many a name now foremost will be supplanted; many a remedy now applauded will be discarded. In appraising such values, let us seek the historical perspective, not be guided by the passions of the hour. Thus doing, we may hope that this coming year will sow as good seed and on as fertile a soil as did that one now immortal in the world's annals, 1776!

Notes and Comments.

School Diseases.

The Rhode Island Medical Society, at its late meeting, gave considerable attention to the causes of disease among children in the public schools, and the members were generally agreed that it is due not so much to hard study as to

bad ventilation and other causes, one of which is hereditary or acquired predisposition for disease; that normal activity of the brain is helpful to the best health of individuals, and that judicious study in school is by itself a healthy functional exercise. They declared, however, against long hours of study, and finally adopted a resolution declaring "that among the most prominent causes of ill health among pupils while attending school we must recognize the following:—Attending balls and parties, sitting up late at night, eating improper food, drinking tea and coffee, and especially reading works of fiction."

On Jaborandi.

Dr. Felippo Cesari, of Rome, in the *Gazeta Medica*, of that city, has an article entitled "Physiological Experiments and Clinical Notes on the Polycarpus Pinnatus, or so-called Jaborandi," in which he comes to the following conclusions:—1. That the jaborandi of Continho has an elective action on the salivary glands. 2. That it has a secondary action, but less constant and copious, upon the sudoriparous glands. 3. That it has well-marked diuretic action. 4. That it produces no effect whatever on the circulation, nor on the generation of heat, nor (except in an unimportant degree) on the respiration. 5. That its action is most efficacious when it is injected into the veins. 6. That its after-effects are distinct debility, with an imperious thirst, directly proportioned to the action of the emunctories. These effects, however, are transitory, and soon disappear under restorative diet.

The Questionable Value of Hypodermic Solutions.

Dr. Lafitte, of Paris, attacks hypodermic medication, so far as the alkaloids are concerned. He says, not the alkaloid, but simply the water, distilled or not, has the merit of allaying pain. Startling cases are mentioned (*L'Union Méd.*, Nos. 113 and 114, 1875), and from these we find that severe lumbago, obstinate neuralgia, etc., are instantly relieved by the injection of about thirty drops of water. Failures are but few, and the author consoles himself respecting these by the consciousness of not having done any harm, if he did no good.

M. Lafitte now asks himself how the simple water acts, and he throws out the theory that the ultimate nerve filaments are compressed by the water, and, being thus paralyzed, can no longer convey the sensation of pain. M. Lafitte goes the length of maintaining that all the hypodermic injections hitherto performed acted through the agency of the water, and he is very particular in stating that his operations were never followed by abscesses or any unpleasant symptoms.

Tuberculosis Treated by Inhalations of Nitrogen.

The *Doctor* states that Dr. Steinbrück declares in the first stages the disease is cured with positive certainty by systematic inhalations of nitrogen, if used long enough. He does not know whether relapses occur. In the second stage improvement and cures are attained to an extent hitherto impossible. The younger the patient the better is the withdrawal of oxygen borne, and the more certain is the result. In the third stage the inhalations are dangerous. All beneficial treatment of tuberculosis must depend upon quieting of the nervous system. The inhalations are practiced in an air-tight cabinet, under the supervision of the physician, and the effects looked for are easier and deeper breathing, with coughing up at first of mucopurulent matter. Subsequently, the cough should stop, the pulse and temperature fall, and the nervous system be calmed.

The Natural Pulse.

Dr. Broadbent, in a late lecture, describes the normal pulse as, of course, of average frequency, regular as to time, and equable as to strength, compressible by moderate force, not shooting under the fingers nor lingering long on the touch. The artery ought not to be easily distinguishable in the intervals of pulsation; it should present no irregularities when the skin is rubbed along its course; and especially it should not roll under the fingers like a solid cord, or be traceable far up the forearm. The pulsations ought not to be visible, or, at any rate, not conspicuous.

On "Teething Sickness."

Dr. Dawson remarks, in the *Journal of Obstetrics*:—

It is the popular idea that when an infant begins to teeth it is time to begin giving him more substantial food, and this is certainly correct in principle; yet this very period of infant life is also popularly considered the

most critical, for the reason that the process of cutting teeth renders the child liable to fevers, convulsions, diarrhœa, etc., and when these disorders occur at this period of infant life the cause is at once said to lie in the fact that "the baby is teething," and that consequently it is an unavoidable misfortune that it is sick. If there ever was an absurd fallacy fastened upon the popular mind, it is, in my opinion, this bugbear of "teething sickness." I have never seen such a case myself, and it is beyond my comprehension why the Creator should afflict only the young of man with a normal physiological process dangerous to health and life.

On the Chemistry of the Urine.

Galipe (*Pharm. Zeitschrift f. Russland*, XIII, 683) uses the following method for the determination of albumen, which is applicable in the presence of the phosphates or the urates. A test-tube is one-third filled with a deep yellow solution of picric acid, and one or more drops of the to-be-tested urine added. If albumen is present, there immediately appears a sharply marked white cloud; upon heating the liquid, the albumen collects in a lump and floats. The reaction leaves nothing to be desired for delicacy.

E. Reichardt, in the same journal, XIV, 45, demonstrates the presence of a body similar to dextrine in albuminous urine.

David writes (*Bull. de la Soc. de Chem. de Paris*, XXIII, 235) of a peculiar urine which decolorizes Fehling's solution, but did not affect the beam of polarized light. A substance possessing the same properties was separated from the urine. The death of the patient so limited the supply of the material that further investigations were prevented. Z. E. B.

Treatment of Croup.

Dr. Lesdorf, says the *Doctor*, contributes the following treatment of croup: At the outset an emetic is to be given, sulphate of copper in small doses every quarter of an hour (until vomiting is produced) being the best; after vomiting, the copper is to be given every two hours, in doses of one-eighth to half grain. The dyspnœa generally ceases after vomiting has once occurred. The administration of copper is to be continued for a day or two until the dry whistling cough has changed its character. A cold compress is to be applied round the neck immediately after vomiting. If the dyspnœa seems not to yield, a vapor bath is to be given, as follows: a wooden vessel, containing eight to ten quarts of hot water, half to three-quarters of a pint of vinegar, and a handful of meal, is to be placed at the foot of the child's bed; a quilt is then to be suspended over the bed, so that one end is to cover the vessel, and the other so arranged that the vapor, in escaping, must pass over the child's head. A red-hot iron is then to be placed in the vessel, and left there so long as it develops the hot acid vapor. This bath is to be repeated every two hours, night and day, while there is any danger. The very best results may be anticipated from this method of treatment, and operative interference, even in acute cases, may often be prevented by energetically carrying it out.

Artificial Milk.

The *American Journal of Pharmacy* says the best substitute for mother's milk, according to Beno Martiny, is the yolk of chicken egg, which weighs, on an average, fifteen grammes, and when diluted with 57.1 grammes of water of about 100° and five grammes of milk-sugar has nearly the same composition as the milk in the first period of lactation. Subsequently, the fat and protein decrease, and to one yolk may be added one hundred grammes of water and six grammes of milk-sugar.

Aconite.

From an elaborate series of observations in *St. Thomas' Hospital Reports*, New Series, vol. v, Dr. John Harley reports conclusions which indicate that, if it be conceded that aconite ameliorates the febrile condition, it does not much control it; and that it cannot in any degree anticipate or cut short the pyrexial stage in a disease (relapsing fever) against which, if it did possess the febrifuge properties ascribed to it, its influence ought to be most marked.

On the Detection of Prussic Acid in Poison Cases.

W. Sokoloff (*Ber. d. deutsch. Chem. Ges. z. Berlin*, VIII, 437) poisoned a young dog with 0.028 grammes of prussic acid. The presence of the poison was detected six, ten, fourteen, and up to twenty-two days after death. Sokoloff further calls attention that in the first distillation of the contents of the stomach with water and sulphuric acid no hydrocyanic acid could be detected, while it showed itself in the

second distillate. This circumstance goes to show that hydrocyanic acid exists after poisoning, not in the form of a simple cyanide, but in that of a double salt, which is decomposed with difficulty by dilute mineral acids. Z. E. B.

Treatment of Cerebral Rheumatism by Chloral.

M. Bouchut, in a memoir, says that cerebral rheumatism is only a form of meningitis. Examination of the membranes of the brain reveal a considerable venous stasis, with an opaline infiltration of the pia mater, caused by numerous leucocytes. The ophthalmoscope discloses a serous infiltration of the papilla and of the retina adjoining, with dilatation of the retinal veins, which represent corresponding changes in the pia mater and in the brain. Rheumatism of the brain is ushered in by delirium more or less violent, terminating by coma or by asphyxia, sometimes very rapid, which may cause death in a few hours. In three cases of this kind, a cure was obtained by means of hydrate of chloral, given by the mouth, in doses of from forty-five grains to one and a half drachms, once or twice at short intervals, so as to obtain an immediate abatement of the agitation the patients presented.

Progressive Muscular Atrophy.

At a meeting of a medical society in Manchester, lately, Dr. Bramwell showed two cases of this strange disease. The first was a pitman, aged twenty-two. Eighteen months ago he first noticed a weakness in his left hand. A pail of water which he was in the habit of carrying slipped every now and again out of his hand. "Cold made the fingers curl up." The right hand became affected a year ago. The patient's general health was very good. The muscles of the body generally were well developed; the biceps remarkably so. The muscles of the left thumb and hand were completely atrophied. The muscles of the right hand were affected, though to a less degree. The muscles of the left forearm were beginning to be atrophied. The second patient was also a pitman. He was twenty-eight years of age. He was admitted to the Newcastle Infirmary some weeks ago, under Dr. Embleton, by whose kind permission Dr. Bramwell was enabled to exhibit the patient. In this case the disease was in a very advanced stage. The man was unable to rise from his seat. He could not raise his hand to his head. The muscles of the arms and thighs were most affected. The disease had commenced only seven months ago, in the ball of the left thumb. It had rapidly spread to other muscles. The atrophied muscles still responded to galvanism. This patient stated that when sitting he felt perfectly well. Vision was somewhat dim. On ophthalmoscopic examination, commencing gray atrophy was seen to be present. This fact favored the nervous origin of the disease.

The Urinology of General Paralysis.

In the West Riding Lunatic Asylum *Reports*, Dr. Merson has a paper on "The Urinology of General Paralysis," at the end of which he thus sums up the results of his observations:—

1. The quantity of urea varies above and below the average of health, being in the majority of cases considerably increased. Probably also the uric acid is increased.

2. The quantities of chlorides and phosphoric acid are notably diminished; that of sulphuric acid remains about normal.

3. The specific gravity varies within wider limits than in health, but the mean does not differ materially.

4. The absolute quantity of urine passed is slightly below the average of the healthy cases examined, but, estimated according to weight of body, the amount excreted by seventeen general paralytics was slightly in excess of that excreted by six healthy men.

5. Under the influence of Calabar bean, there is a considerable diminution in the quantity of all the solid constituents, especially the urea.

The results obtained in the three cases treated with alcohol are in favor of the view that both the quantity of urine and the amount of solid constituents are diminished under the influence of that substance.

Swallowing a Screw.

Dr. W. F. Hilrabeck, of Windsor, Illinois, gives us the following curious incident:—

A boy two years old swallowed a common wood screw one inch in length; the head of the screw was ¼ of an inch in width. It was forty-four hours in passing through the alimentary canal. The child seems to suffer no inconvenience from its dose of hardware. It is enjoying as good health now as before it swallowed the screw.

CORRESPONDENCE.

How Long May the Efficacy of Vaccination be Relied On?

ED. MED. AND SURG. REPORTER:—

The above question is so often asked, and so variously answered, and often answered so little in accordance with the actual facts, that we are not much surprised at the growing distrust in the efficacy of vaccination as a safeguard against small-pox.

Jenner taught that protection by vaccination was life-long. It did not require the observations of half a century to disprove this statement of the great discoverer.

The question, "How long?" cannot with certainty be answered. It is generally agreed by all observing members of the profession that protection by thorough vaccination is for a few years certainly reliable. It is highly probable that one person may be protected by vaccination for a longer time than another person of equally distinct cicatrix.

The range of susceptibility to any contagion is very wide in the human family. One individual will contract disease, while another equally exposed will escape with impunity. It is certainly safe to vaccinate indiscriminately every five years, or oftener if the disease prevail. At least make the effort. "Best safety lies in fear." But, since specific disease enters so largely into the catalogue of human ills, we unhesitatingly commend the employment of animal vaccine virus.

We have repeatedly vaccinated individuals well advanced in years, and obtained a typical vesicle, though numerous efforts had failed in the same person in years gone by, subsequent to vaccination in early life. The writer was vaccinated in his first decade, and well remembers some of the constitutional symptoms. A distinct cicatrix is still visible, and bears testimony to the completeness of the work. He also believes that that vaccination afforded immunity against small-pox for more than a third of a century. The following are his reasons for the hope within him:—

During the late war, being on duty in the valley of the Mississippi, the writer was designated to muster for pay, and to sign the rolls for all the patients and attendants in and about the small-pox hospital, situated a few miles outside of Memphis. Military orders are peremptory, and this one was promptly complied with. On reporting at the hospital, he was forthwith conducted into every occupied apartment of the building, thus coming in contact with the disease in all its stages, except the stage of incubation, which is the very least dangerous, and perhaps never seen in a small-pox hospital, except in an attendant, as that stage is generally over before being sent to hospital.

The muster completed and the rolls signed, he returned to the Post Hospital, of which he had charge, and vaccinated himself and all unvaccinated attendants most thoroughly. Upon himself no symptoms of a vesicle appeared.

Within the next three months numerous cases of small-pox occurred in the fort, in the prison, and in the Post Hospital, bringing him daily in contact with its emanations, and yet he escaped the disease.

In 1872–73, at Parker's Landing, Pa., there occurred an epidemic of small-pox of very fatal type. Here, again, the writer came in contact with the disease in its worst form, ministering to the sufferers' wants night and day, and yet suffered no inconvenience in health from the contact.

After making a call on a case of small-pox, he would sponge off his clothing, hands, face and feet with gasoline. (Gasoline, by the way, turned out to be one of the very best antiseptics, and one which we freely used before knowing its full value.) Here, again, he vaccinated himself freely, but to no effect.

During the present winter the writer was detained at Cumberland City, Md., for a few hours. Here small-pox is epidemic with unusual fatality. The writer procured from the Pennsylvania Vaccine Agency a quill of animal virus, with which he again vaccinated himself, and at this writing there is a typical vesicle in full bloom on his arm. The constitutional symptoms are also well marked.

A. D. BINKERD, M.D.

The Frequency of Triplet Births.

ED. MED. AND SURG. REPORTER:—

On December 10th, 1875, Mrs. Martha B. Barr, of New Castle, Lawrence county, Pa., gave birth to triplets, two boys and a girl, weighing respectively six, six and a half, and seven and a half pounds, including slips. Being in town on the 14th inst., I called to see the little strangers, and found mother and babes all doing well. Mrs. Barr had walked a considerable distance the day previous to her confinement, and carried a child two years old. Dr. Isaac Winans, of New Brighton, was the attending physician. Mrs. Barr is aged twenty-five, and the mother of three other children, one of whom is dead.

There is also a lady in Buffalo township, this county, viz., Butler, Mrs. McCaffeily, who gave birth to triplets, March 27th, 1873. There are two boys and a girl in this little trio also. They are all living and well. They were on exhibition at a harvest home recently held in Penn township, this county. They look very much alike. There is also another lady in Worth township, Butler county, and one in Beaver, Beaver county, who recently gave birth to triplets.

My father, Dr. Robert Cunningham, of North Sewickley, some years ago delivered a Mrs. Wm. Smiley and Mrs. John C. Johnson, neighbor women, of triplets, also a Mrs. Ralston. These three were the only ones which fell to his lot during a practice of twenty-five years,

and two of these, Mrs. Smiley and Mrs. Johnson, happened in the same year. My father is dead, but I remember the circumstances well, and the dates are in his book, which can be given at any time.

I give you these facts to show that triplets are of more frequent occurrence than is generally conceded. In Churchill's system of Midwifery, Philadelphia, ed. 1846, p. 411, there are statistical statements on the subject of twin and triplet pregnancies. Dr. Churchill states that out of 448,998 cases of pregnancies there were 5776 cases of twins, or one in 77¼, and 77 cases of triplets, or one in 5831 cases. Now, if triplet births occur as frequently in other places as in our immediate vicinity, I think the number would exceed the above statement. I know if all cases were reported it certainly would do so.

A. V. CUNNINGHAM, M. D.

Zelienople, Dec. 15th, 1875.

NEWS AND MISCELLANY.

Items.

—Deaths from trichinosis are reported from Indianapolis, and in Hamilton county, Indiana.

—The total number of lunatics and idiots in the asylums and prisons of the Canadian province of Ontario is officially reported at 1179, an increase of 104 during the year.

—A medical commission, appointed by the Board of Health in Boston, to investigate the sanitary condition of that city, reports that nearly two-thirds of its total population are foreigners and their offspring, and of this proportion two-thirds are Irish.

—The immigration to the United States during the last fiscal year numbered 227,498. This is a falling off of 85,841, compared with the previous year, and of 232,305, compared with 1872-3. The decline in two years, it will thus be seen, is slightly over one-half.

—Mr. Henry Bergh, of New York, in his last protest against vivisection, says:—"The most learned physiologists of the present and past centuries have declared vivisection to be a scientific failure, and some of the leading surgeons in this city and country pronounce living experiments—except in one single example, the nervous system—to be needless barbarity when not performed by the aid of anæsthetics."

QUERIES AND REPLIES.

Dr. B. A. M., of Mo.—There is nothing in the Code of ethics forbidding a physician placing on his sign "Physician and Surgeon." It may not be good taste, however.

Dr. W. H. H. S., of Ga.—What you complain of is *pruritus hyemalis*. We know of no efficient treatment for it.

OBITUARY.

DR. CHARLES MIFFLIN.

Dr. Charles Mifflin died in Boston, December 9th, aged seventy years. He was born in this city, July 19th, 1805, graduated at the University of Pennsylvania, and studied medicine under the charge of Dr. Thomas T. Hewson. He practiced medicine in this city from 1826 to 1838, and was one of the surgeons attending the cholera hospital in 1832. In 1835 he married a daughter of the Hon. Benjamin Crowninshield, of Boston, and in 1838 removed to that city. Subsequently he lived at Nahant, where he practiced for many years.

MARRIAGES.

BACON—READ.—At Columbia, Mo., Wednesday, 15th ult., Charles A. Bacon, M. D., of this city, and Mary Brice Read, daughter of Dr. Daniel Read, President of the State University of Missouri.

BROWN—RUDMAN.—December 15th, at the residence of the bride's mother, by Rev. A. A. Rickett, Alexander Brown, M. D., and Bertha J. C. Rudman, youngest daughter of the late Wm. C. Rudman.

BUTLER—HOLTON.—In Dummerston, Vt., Nov. 24th, by the Rev. L. G. Chase, Fred M. Butler, of Jamaica, and Lillian H. Holton, of Dummerston.

CARTER—HAZEN.—December 4th, by Rev. Moses Kidder, T. C. Carter, of Boston, and Percy, only daughter of Dr. Edwin Hazen, of Woodstock, Vt.

DARLING—WILSON.—In Georgetown, Mass., Dec. 1st, by Rev. Mr. Marsh, Dr. J. H. Darling, of Thompsonville, Ct., formerly of Keene, N. H., and Carrie E. Wilson, of Georgetown.

EVANS—TAYLOR.—In Newport, Ky., on Thursday evening, December 2d, by Rev. H. W. Taylor, Firman R. Evans, M. D., of Franklin, Ohio, and Miss Sallie Kemper Taylor, daughter of the officiating clergyman.

LANGDON—EDWARDS.—At the residence of Wm. Edwards, Esq., December 1st, 1875, by Rev. Daniel J. Jones, Dr. H. A. Langdon and Miss Sidney Edwards.

MCCANDLESS—BECK.—By the Rev. J. A. Crawford, D. D., of Chambersburg, Dr. W. A. McCandless and Mary M. Beck, all of this city.

PEALE—WISWELL.—At Green Hill Presbyterian Church, Philadelphia, Thursday, December 23d, 1875, by the Rev. Dr. Beadle, Emily S. Wiswell, daughter of Rev. G. F. Wiswell, and Dr. Albert C. Peale, of the U. S. Geological Survey.

PERKINS—COOK.—In Moodus, Conn., Nov. 25th, Myron W. Perkins, formerly of Windsor, Vt., and Mattie S., daughter of Dr. H. C. Cook.

DEATHS.

ANDERSON.—On October 19th, at Lahore, India, Dr. Henry James Anderson, of this city, in the 77th year of his age.

BRADLEY—William J. Bradley, son of Dr. I. B. Bradley, of Fryeburg, Maine, died in Philadelphia, the 5th ult., aged 27 years and 7 months.

DOUGHTY.—In New York, on the 21st ult., Augustus Durkee, only child of Dr. F. C. and Hannah M. Doughty, aged 8 months and 19 days.

DUNHAM.—On Thursday, December 9th, Dr. Chas. Dunham, in the 46th year of his age.

GREEN.—In Trenton, N. J., on the 2d inst., Mary A., wife of Dr. Wm. Green.

JACKSON.—Dr. John Davis Jackson, a prominent physician of Kentucky, died at Danville last week, aged 42 years.

LEWIS.—On the evening of the 21st ult., in Philadelphia, Mrs. M. Faris Fassitt, wife of Dr. E. J. Lewis.

PARKER.—On Saturday, 18th inst., Dr. Joseph E. Parker.